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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,231	11/15/2000	Norikazu Arai	02860.0661	8692

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EXAMINER

HINDI, NABIL Z

ART UNIT PAPER NUMBER

2655

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

4

Office Action Summary

Application No.
09/712,231

Applicant(s)

Arai et al

Examiner

Nabil Hindi

Art Unit

2655



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-13, 16, 20-31, and 34-36 is/are rejected.
- 7) ☒ Claim(s) 9, 10, 14, 15, 17-19, 32, and 33 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 2653

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-8, 11-13, 16, 20-31, and 34-36 as far as proper and understood are rejected under 35 U.S.C. 102(e) as being anticipated by Saito et al (6192021).

The independent claims recite non-positive limitations such as “substantially” and alternative limitation “or”. Thus only one of the alternative limitation must be shown to read on the claimed invention. In addition, what is substantially to one skilled in the art is different to another. The

Art Unit: 2653

reference shows an optical disk reproducing apparatus comprising: for reading different disk types having variable thickness (20 and 20'), a first light source and a second light source 11, 12, a converging optical system for focusing the light beams onto the disks 16, the converging system having diffraction section "substantially " on the entire surface S1, for generating an m-th order light beam when reading a first disk fig 2a, and generating an n-th order light beam when reading a second disk fig 2c, and a spherical aberration having a discontinued portion for reading the second disk (column 15 lines 1-24).

With respect to the limitations of claims 2 and 24. The reference in figs 2a and 2c shows the use of a zero and first order light beams in reading two different disk types.

With respect to the limitations of claims 3 and 25. The claim read on any value between one and infinity since the claim did not recite any values corresponding to the objective lens. Thus any value within the reference would read on the claimed invention, see the description referenced to Table 14.

With respect to the limitations of claims 4 and 26. The claim read on any value between one and infinity since the claim did not recite any values corresponding to the objective lens. Thus any value within the reference would read on the claimed invention see fig 20b showing a ring shaped band and claims 27 and 28.

With respect to the limitation of claim 5. The use of spot diameter and numerical aperture at a value falling within the claimed range is cited in column 6 lines 1-5 and column 12 lines 1-3.

Art Unit: 2653

With respect to the limitations of claims 6 and 7 see fig 2a-4c showing the diffractive section on the spherical surface.

With respect to the limitations of claims 8 and 16. The reference discloses the use of maximum 0.05 first wavelength which falls within the claimed range (see column 12 lines 1-23.

With respect to the limitations of claims 11 and 29 see column 10, and 26 lines 10-15 disclosing the use of two and three discontinuous areas.

With respect to the limitation of claim 12 see element 16 having a convex positive power.

with respect to the limitations of claims 13, 30, 31, 34 and 35 see column 24 lines 54-63 and fig 20b.

With respect to the limitation of claim 20, 21, and 28 see fig element 16 sections sd1-sd3.

With respect to the limitation of claim 27. The claim read on any objective lens having a height, a length and a discontinuous portions as shown by element 16 in the reference.

Claims 9, 10, 14, 15, 17-19, 32 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

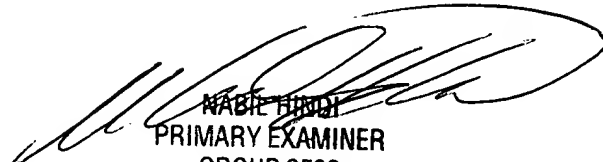
None of the cited prior art discloses the use of an objective lens having the absolute values, a diffraction ring shaped band, or the numerical aperture NAZ values falling within the claimed limitation.

Application/Control Number: 09/712231

Page 5

Art Unit: 2653

Any inquiry concerning this communication should be directed to NABIL.HINDI at
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2653